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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/772,513 | 02/05/2004 | Hoe-Won Kim | 678-1348 | 6897 |
| 28249 | 7590 | 10/30/2006 | EXAMINER | |
| DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553 | | | SHARMA, SUJATHA R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2618 | |

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/772,513 | KIM, HOE-WON | |
| | Examiner | Art Unit | |
| | Sujatha Sharma | 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/19/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) which papers have been placed on record in the file.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Toyryla [US 5,970,417].

Regarding claim 1, Tyrola discloses a method for maintaining a group call. Tyrola further discloses a method comprising the steps of:

- a) generating extended group call service information including information about base stations (BSs) that cover a neighboring group call area (NGCA) and broadcasting by a BS that does not cover a group call area (GCA) but is located in a radio network near to the GCA the extended group call service information; see col. 3, lines 40-67, col. 6, lines 3058. Here the group call maintenance message has the same definition as the applicant's "group call service information".
- b) selecting a BS in the best service condition among BSs set in the extended group call service information as a BS from which an extended group call service is to be received

by a mobile station (MS) that is configured to receive the extended group call service information; see col. 6, lines 31-47

- c) receiving by the MS group call paging information from the BS; see col. 6, lines 38-48
- d) analyzing by the MS the group call service is available from the BS; and determining if the group call service is available from the BS see col. 6, lines 31-58
- e) registering by the MS and connecting to the selected BS if the group call service is available from the BS and receiving the group call from the BS. See col. 6, lines 31-58

Regarding claim 2, Toyryla further discloses a method wherein in step (a), the BS generates the extended group call service information including the identifications (IDs) of the BSs (NGCA BSs) covering the NGCA, the frequency information of the NGCA BSs, and the group call IDs of the NGCA BSs. See col. 6, lines 48-58.

Regarding claim 3, Toyryla further discloses a method wherein in step (c), the MS receives the group call paging information on a notification channel (NCH). See col. 5, lines 15-35, col. 6, lines 31-58 where the mobile station listens to the control channel or special signaling channel such as the paging channel for notification message i.e. S1.

Regarding claim 4, Toyryla further discloses a method wherein in step (c), if the MS fails to receive the group call paging information from the BS, the MS re-selects a BS from which to receive the extended group call service and receives group call paging information from the re-selected BS. See col. 11, lines 4-65 and Fig. 13

Regarding claim 5, Toyryla further discloses a method wherein in step (c), if the MS fails to receive the group call paging information from the BS, the MS repeats reception of next group call paging information from the BS a predetermined number of times, and if the MS fails to receive for at least the predetermined number of times the group call paging information from the BS, the MS re-selects a BS from which to receive the extended group call service and receives group call paging information from the re-selected BS. See col. 9, lines 9-67 and col. 11, lines 4-65 and Figs. 6,8,9,12 and 13

Regarding claim 6, Toyryla further discloses a method wherein in step (e), the MS changes location registration to the BS and receives a signal for the group call and a signal for a radio communication service from the BS. See col. 10, lines 14-21

Regarding claim 7, Toyryla further discloses a method wherein in step (e), the MS registers only group call service information about the MS to the BS and receives the group call from the BS, while receiving the signal for the radio communication service from a BS to which the MS has already location-registered. See col. 6, lines 6-68

Regarding claim 8, Toyryla discloses a method, further comprising the step of repeating step (d) after receiving the group call paging information from the BS by the MS if the group call service is not available from the BS in step (d). See col. 11, lines 4-65 and Fig. 13

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Regarding claim 9, Toyryla discloses a method wherein if the group call service is not available from the BS in step (d), further comprising the steps of:

(f)analyzing by the MS paging information received from a BS to which the MS has already registered to; see col. 6, lines 6-18

(g) deciding whether the group call paging information from the selected BS has been changed by the MS, if the group call paging information is included in the paging information; see col. 6, lines 6-30. Here the mobile realizes that it has moved from coverage area of BS2 to coverage area of BS4

(h) re-selecting by the MS a BS from which to receive the extended group call service if the group call paging information has been changed and receiving group call paging information from the re-selected BS. See col. 6, lines 6-47. Here the mobile reselects BS2 for the group call based on the group call paging message it has received indicating that BS4 cannot support the group call.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| | |
|-------------------------|--|
| Ohnishi [US 5,457,809] | Group communication method between mobile stations |
| Kinnunen [US 6,54,995] | Maintenance of group call in mobile communication system |
| Bruckert [US 6,169,906] | Method of transmitting messages in a dispatch call |
| O'Neill [US 6,922,547] | Method and apparatus for supporting group communications |
| Schmidt [US 6,516,200] | Controlling communications terminal, response to group call page based on group call characteristics |

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Sollner [US 5,506,837] Cellular radio communication system which is selectively convertible into a trunked radio communication system for group calls

Dailey [US 6,377,560] Group call capability in a wireless network

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sujatha Sharma
Oct 23, 2006